

# Work Order ID 55142

January 7, 2010 8:36:20 AM

Page 1

Item ID: D3281-2

Accept

Setup Start

Revision ID:

Stop

Item Name: Floor Protector, Fwd RH

Start Date: 07/01/2010 Start Qty: 10.00

Cust Item ID:

Required Date: 15/01/2010 Req'd Qty: 10.00

Customer:

Reference:

Run Start

Approvals:

Process Plan:

Date: 10-1-07 Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3281

Rev D

100

0.00



HAND FINISHING THERMOFORMING

Thermoform

Memo

0.00

Thermoforming Machine

Cut Blanks

BB  
10/01/20  
X10

110

0.00



THERMOFORMING MACHINE

Thermoform

Memo

0.00

Thermoforming Machine

Thermoform as per Dwg. D3281 and Folio FTA 008 Dwg. Rev.  
D Folio Rev. D

BB  
10/01/20  
X10

120

0.00



QC2- Inspect parts off machine FAI/FAIB

QC

Memo

0.00

Quality Control

BB  
10/01/20  
X10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Page 2

Accept

100

**Setup Start**[illegible]

## Stops

**Abstract**

**Cust Item ID:**

**Customer:**

**Required Date:** 15/01/2010      **Req'd Qty:** 10.00

**Reference:**

Run Start

**RESEARCH DESIGN**

**Approvals:**

**Process Plan:**

**Date:**

### Tooling:

**Date:**

## Stop

1. The first step is to identify the key components of the system. This involves understanding the hardware, software, and data involved in the process.

QC:

Date:

SPC (Y/N):

Date:

[illegible]

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

**Work Order ID 55142**

Page 3

January 7, 2010 8:36:21 AM

Item ID: D3281-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector, Fwd R&amp;H

Start Date: 07/01/2010 Start Qty: 10.00



Cust Item ID:

Required Date: 15/01/2010 Req'd Qty: 10.00



Customer:

Reference:

Run Start



Approvals:

Process Plan:

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run HoursDraw  
NumberDraw  
Rev.Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160



Packaging

0.00

Packaging

Memo

0.00

Packaging

10-1-27 *[Signature]*

170



QC21- Final Inspection - Work Order Release

0.00

QC

Memo

0.00

Quality Control

10/01/27 *[Signature]*  
MF 10-1-27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

January 7, 2010 8:36:25 AM

Page 1

Work Order ID: 55142

Parent Item: D3281-2

Parent Item Name: Floor Protector, Fwd RH

Start Date: 07/01/2010

Required Date: 15/01/2010

Comments:

IPP Rev A 04.07.01 New issue KJ/JLM

IPP Rev B 07.08.07 Thermoform in house DL

IPP Rev C 08.02.06 To reflect updated dwg. DL

IPP Rev D 08.04.15 Material Change DL

Start Qty: 10.00

Required Qty: 10.00

MLEXS.093-F6006-02

Purchased

No

100

sf

1,376.930 43.3300



GE PLASTICS LEXAN SHEET

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

MAT

1376.93

106751

6.26

110877

1370.67

BB  
10/01/20  
10

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



<b>DART AEROSPACE LTD</b>		<b>Work Order:</b>	55142
<b>Description:</b> Floor Protector, Fwd RH		<b>Part Number:</b>	D3281-2
<b>Inspection Dwg:</b> D3281 <b>Rev:</b> D		Page 1 of 1	

### FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

#### THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than 0.1875" Go/No Go	✓			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: JB Date: 10/01/25

#### TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
16.3	+/-0.100	18.3	✓			
17.4	+/-0.100	17.4	✓			
12.1	+/-0.100	12.075	✓			
0.95	+/-0.030	.972	✓			
0.25	+/-0.030	.255	✓			
0.030	Min	.048	✓			
0.070	Min	.075	✓			

Measured by: JB Date: 10/01/25  
Audited by: DL Date: 10/01/25  
Prototype Approval: N/A Date: N/A

Rev	Date	Change	Revised by	Approved
A	08.02.28	New Issue	KJ/DL	
B	08.04.16	Dimensions updated per Dwg Rev D	KJ/DL	
C	08.07.23	Dwg Rev updated	KJ/DL	
D	08.09.12	Tolerance revised for 0.070 dimension	KJ/DL	

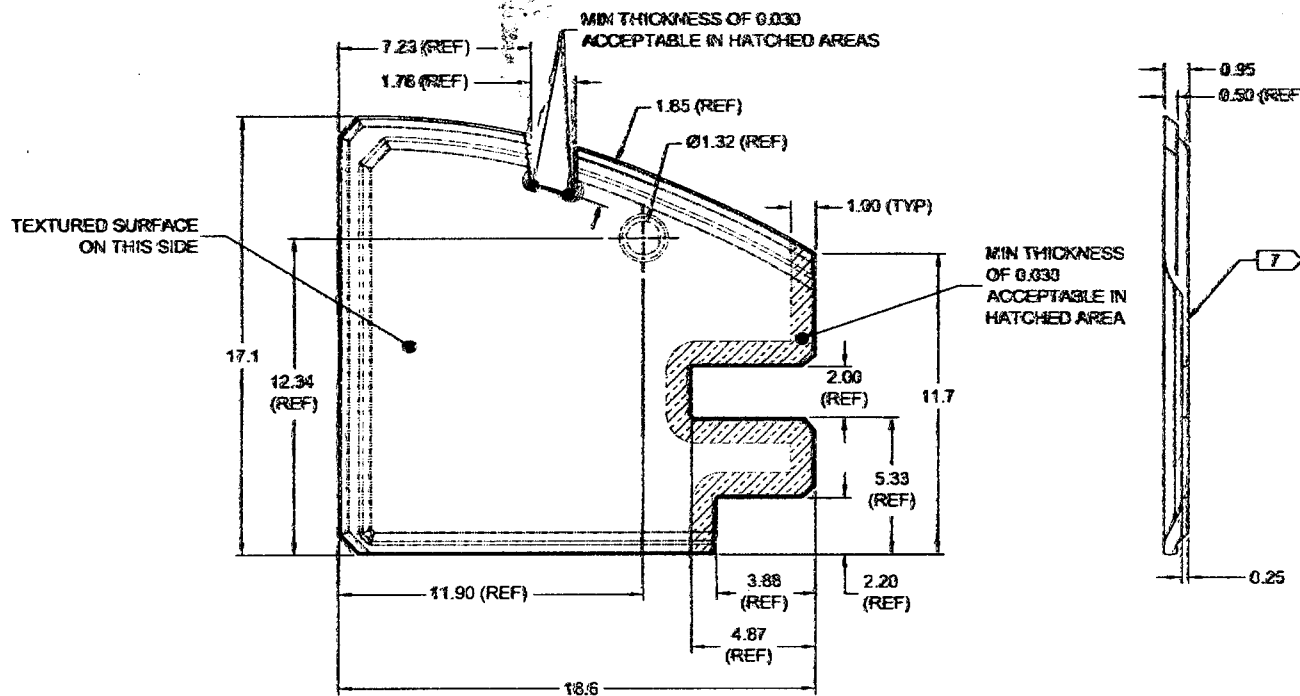
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

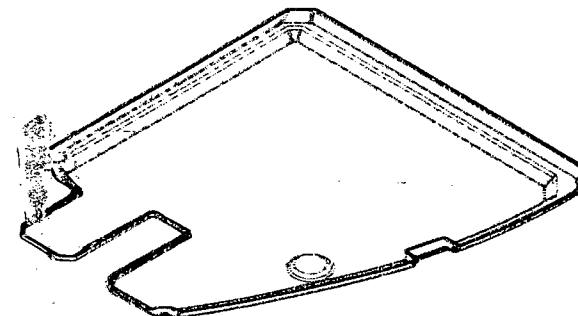
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D3281-1 FLOOR PROTECTOR**



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER

NO. 55142  
1310-1-07

RELEASED  
105-0411 WPD

**11-1 NOTES:**  
HERMOFORM WITH MOLD D3281-1T1 PER DART QSI 022; TRIM AS SHOWN  
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED  
MATERIAL: LEXAN F6006, BLACK No. 701, 0.053" THICK  
(REF DART SPEC MLEXS.093-F6006-02)

FINISH: NONE  
TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
UNITS: INCHES UNLESS OTHERWISE NOTED  
BREAK SHARP EDGES: 0.010 MAX  
IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-1" AND BATCH NUMBER "BXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS  
WEIGHT: 0.95 lb

D	THICKNESS 0.093 WAS 0.125, MIN THICKNESS 0.070 WAS 0.060, P/N AND B/N ID WITH VIBRATING STYLUS (ZN A7-1, A7-2, A7-3, A7-4); D3281-4 NOW ON PAGE 4; CORRECT WEIGHTS (ZN A8-1, A8-2, A8-3, A8-4)	PH	05.03.28
C	UPDATE DIMS TO MATCH PARTS; COLOUR 701 WAS 702; GENERAL UPDATE	UE	07.10.09
B	NOW LEXAN; DIMS AS MANUFACTURED	OP	05.11.25
A	NEW ISSUE	OP	04.05.03
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	MARMESSURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. D
MFG. APPR.	<i>[Signature]</i>	D3281	SHEET 1 OF 4
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	FLOOR PROTECTOR	NTS
DATE	08.03.28	COPYRIGHT © 2004 BY DART AEROSPACE LTD THIS DOCUMENT IS UNCLASSIFIED AND IS SUBJECT TO THE OPENING CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE, OR COPIED OR COMMUNICATED TO ANY OTHER PERSON OR BODY WITHOUT PERMISSION FROM DART AEROSPACE LTD	

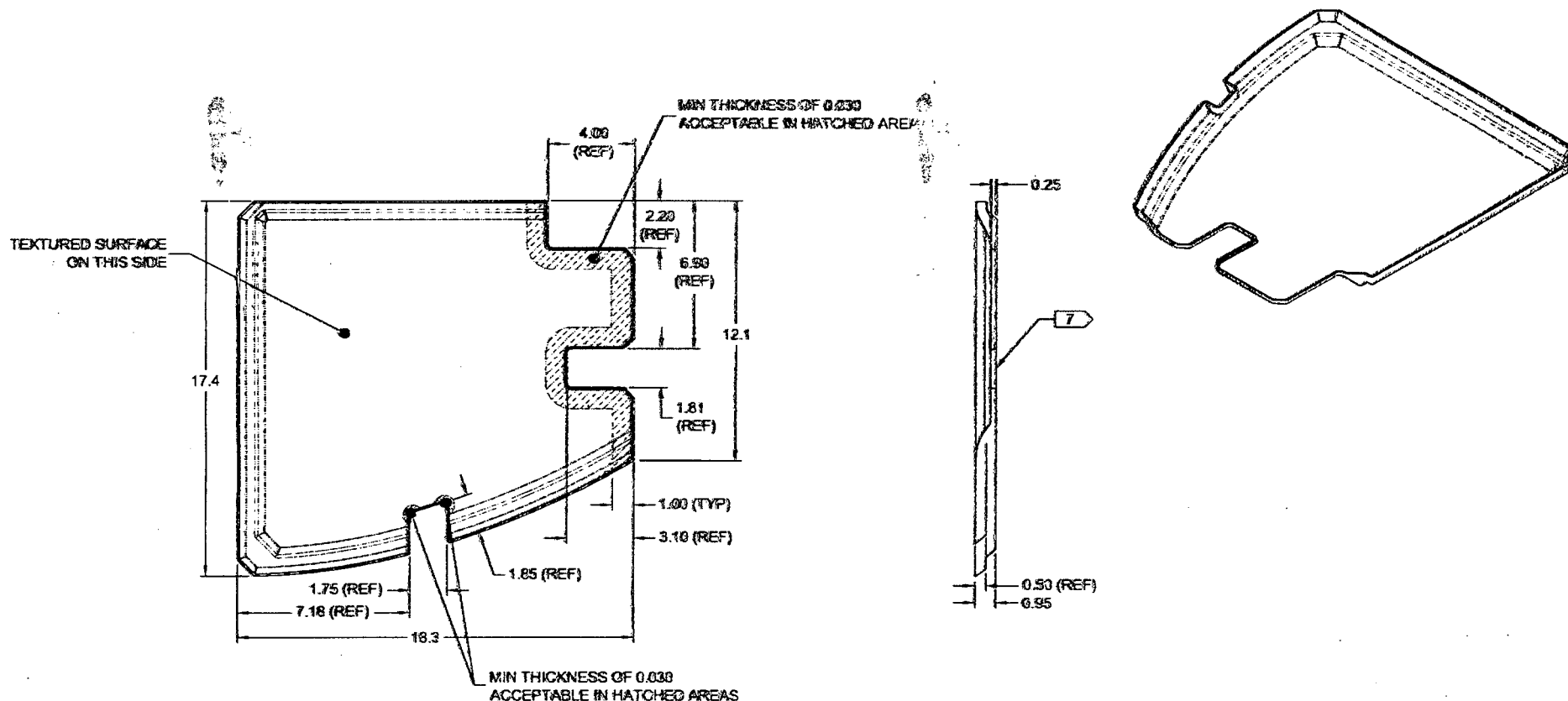
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



### D3281-2 FLOOR PROTECTOR

#### 11-2 NOTES:

HERMOFORM WITH MOLD D3281-2T1 PER DART QSI 022; TRIM AS SHOWN  
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED  
MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK  
(REF DART SPEC MLEXS.093-F6006-02)

FINISH: NONE

TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

UNITS: INCHES UNLESS OTHERWISE NOTED

WEEK SHARP EDGES: 0.010 MAX

IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-2" AND BATCH NUMBER "BXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS

WEIGHT: 0.97 lb

DESIGN	90	DART AEROSPACE LTD	
DRAWN	14	HAMMERSBURY, ONTARIO, CANADA	
CHECKED	5	DRAWING NO.	REV. D
MFG. APPR.	14	D3281	SHEET 2 OF 4
APPROVED	14	TITLE	SCALE
DE APPR.	14	FLOOR PROTECTOR	NTS
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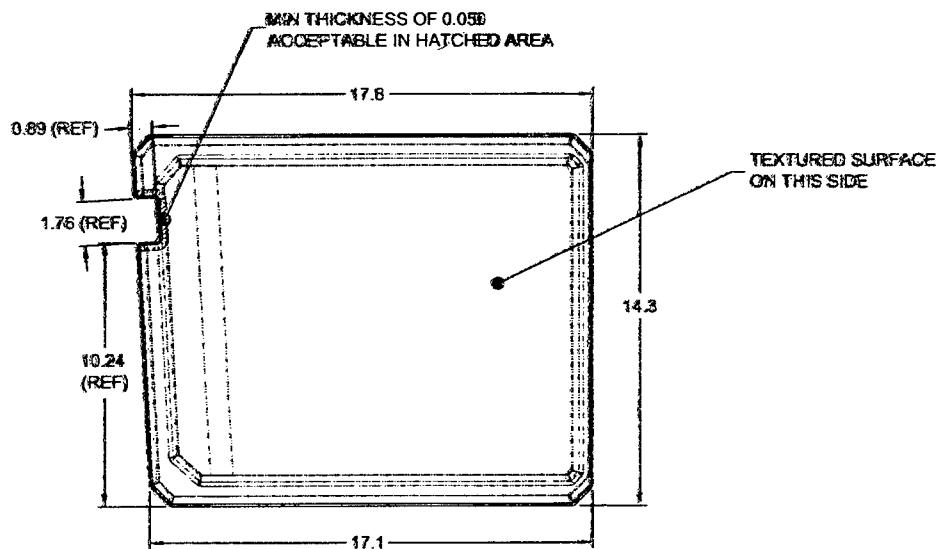
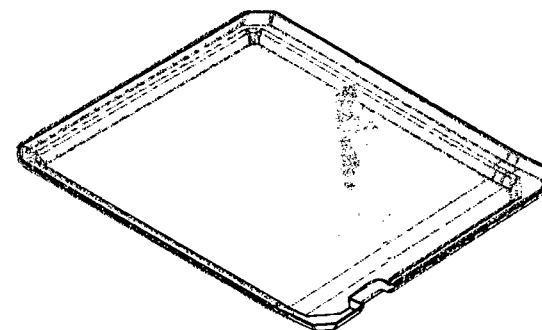
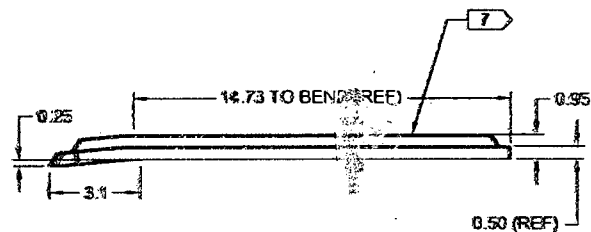
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



### D3281-3 FLOOR PROTECTOR

#### 31-3 NOTES:

HERMOFORM WITH MOLD D3281-3T1 PER DART QSI 022; TRIM AS SHOWN  
 MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED  
 MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK  
 (REF DART SPEC MLEXS.093-F6006-02)

FINISH: NONE  
 TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED  
 UNITS: INCHES UNLESS OTHERWISE NOTED  
 BREAK SHARP EDGES: 0.010 MAX  
 IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-3" AND BATCH NUMBER "XXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS  
 WEIGHT: 0.87 lb

DESIGN	40	DART AEROSPACE LTD	
DRAWN	RE	HAWKESBURY, ONTARIO, CANADA	
CHECKED	1	DRAWING NO.	REV. D
MFG. APPR.	MD	D3281	SHEET 3 OF 4
APPROVED	MD	TITLE	SCALE
DATE	08.03.28	FLOOR PROTECTOR	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

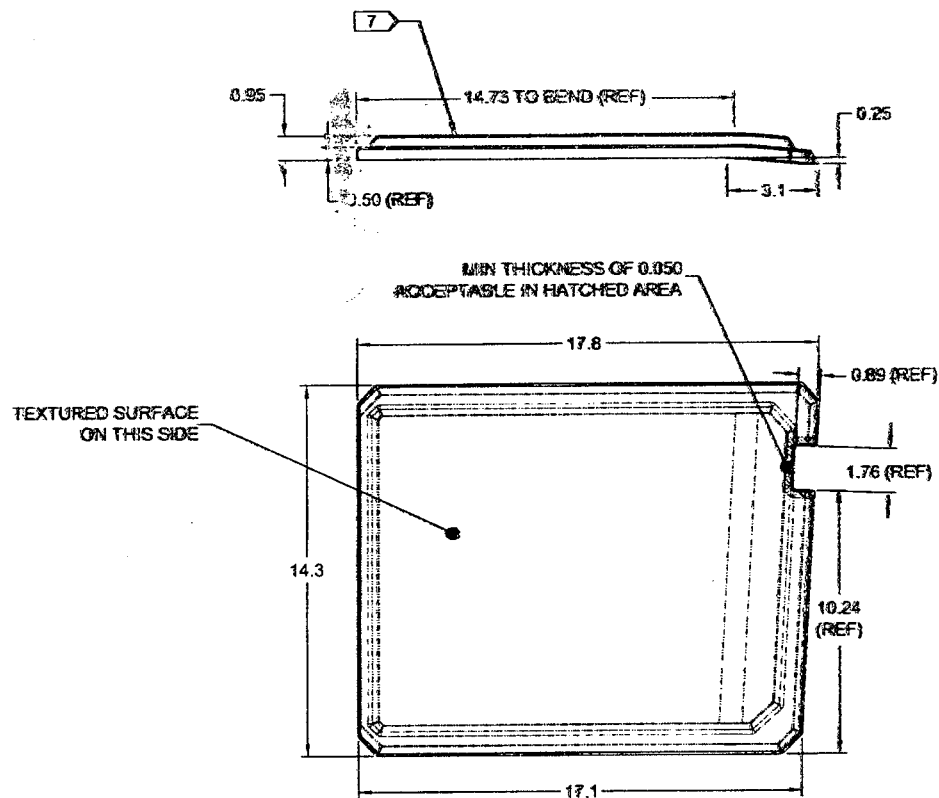
Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries





**D3281-4 FLOOR PROTECTOR**

**21-4 NOTES:**

HERMOFORM WITH MOLD D3281-4T1 PER DART QSI 022; TRIM AS SHOWN  
MINIMUM THICKNESS AFTER FORMING: 0.070" EXCEPT WHERE INDICATED

MATERIAL: LEXAN F6006, BLACK No. 701, 0.093" THICK  
(REF DART SPEC MLEXS.093-F6006-02)

FINISH: NONE

TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

UNITS: INCHES UNLESS OTHERWISE NOTED

MAX SHARP EDGES: 0.010 MAX

IDENTIFICATION: IDENTIFY WITH DART P/N "D3281-4" AND BATCH NUMBER "XXXXXX" ON SMOOTH SIDE OF PART USING VIBRATING STYLUS

WEIGHT: 0.87 lb

*W/O 55142*

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAMMERSBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. D
MFG. APPR.		D3281	SHEET 4 OF 4
APPROVED		TITLE	SCALE
CRE APPR.		FLOOR PROTECTOR	NTS
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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries